CLAIMS:

1. A method of determining the presence of a leakage from a fluid system comprising sensing the vibrations induced by passage of the fluid through the leakages; segmenting the sensed vibrations into at least two spectral bands; comparing the amplitudes of the spectral bands with predetermined values to determine flow rate.

2. A method according to claim 1, further comprising attaching a sensor to the fluid system to obtain data therefrom indicative of fluid flow therethrough.

3. A method according to claim 2, wherein the sensor includes a piezo-electric material.

4. A method according to claim 3, wherein the sensor includes a PVDF film.

5. A method according to claim 2, wherein the sensor comprises one of a strain gauge, geophone or hydrophone.

6. A method of determining leakage from a fluid system substantially as hereinbefore described with reference to the accompanying drawings.

7. Apparatus for determining the presence of a leakage from a fluid system comprising a vibration sensor for sensing vibrations induced by passage of the fluid through the leakages, a segmentor for segmenting the

sensed vibrations into at least two spectral bands, a comparitor for comparing the amplitudes of the spectral bands with predetermined values to determine flow rate.

8. Apparatus as claimed in claim 7 wherein the sensor includes a piezo-electric material.

9. Apparatus as claimed in claim 8 wherein the sensor includes a PVDF film.

10. Apparatus as claimed in claim 8 wherein the sensor comprises one of a train gauge, geophone or hydrophone.

11. Apparatus for determining leakage from a fluid system substantially as hereinbefore described with reference to the drawings.

12. A leakage detection system for use in a fluid carrying system which leakage detection system comprising:

at least one sensor mountable to the exterior of a pipe of the fluid carrying system which sensor comprising a vibration sensor for measuring vibrations in the pipe caused by fluid flow in the pipe and to provide output signals indicative of the vibrations; and

a processing unit for receiving signals from at least one sensor and for comparing the received signals with reference data to determine the presence of a leak.

13. A leakage detection system as claimed in claim 12 including apparatus as claimed in claims 7 to 11.

14. A leakage detection system substantially as hereinbefore described with reference to and as illustrated by the drawings.